

Application No. 10/675,607
Response to Office Action

Customer No. 01933

Listing of Claims:

1. (Currently Amended) An antenna comprising:

a core material which ~~is formed by laminating~~ includes a plurality of thin plates made of a magnetic material and laminated together, both end portions of the core material being widened in a thickness direction with respect to a central portion of the core material; and

a coil which is wound around the core material;

a spacer which is provided between at least two thin plates of the plurality of the thin plates at the both end portions of the core material.

2. (Currently Amended) The antenna as claimed in claim 1, wherein the magnetic material ~~comprises~~ is amorphous.

Claims 3 and 4 (Canceled).

5. (Original) The antenna as claimed in claim 1, wherein the antenna receives a long wave.

6. (Original) The antenna as claimed in claim 1, wherein the antenna receives an electric wave that includes a time data.

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7. (Original) The antenna as claimed in claim 1, wherein the antenna is contained in a case of a wristwatch.

8. (Currently Amended) The antenna as claimed in claim 1, further comprising a core material case which encases the core material and around which the coil is wound.

9. (Currently Amended) ~~The~~ An antenna ~~as claimed in claim 1, wherein the core material comprises~~ comprising:

a core material which includes a plurality of thin plates made of a magnetic material and laminated together, both end
5 portions of the core material being widened in a thickness direction with respect to a central portion of the core material;
a coil which is wound around the core material;
wherein the plurality of thin plates comprise:

10 a first group of the thin plates, ~~a section of which is flat~~ in a length direction ~~is horizontal~~ thereof; and

a second group of the thin plates which is laminated on the first group of the thin plates, ~~a section of the said second group of the thin plates in a length direction~~ having a ~~horizontal~~ central portion which is flat in a length direction of
15 the second group and ~~both~~ end portions which are bent in the a thickness direction of the second group.

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10. (Currently Amended) The antenna as claimed in claim 9,
~~wherein the spacer is further comprising at least two spacers~~
provided between both end portions of the first group of the thin
plates and ~~the both~~ corresponding said bent end portions of the
second group of the thin plates.

11. (Currently Amended) The antenna as claimed in claim 9,
wherein the magnetic material ~~comprises~~ is amorphous.

12. (Currently Amended) ~~The An~~ antenna ~~as claimed in claim~~
~~1, wherein the core material comprises~~ comprising:

a core material which includes a plurality of thin plates
made of a magnetic material and laminated together, both end
5 portions of the core material being widened in a thickness
direction with respect to a central portion of the core material;
a coil which is wound around the core material;
wherein the plurality of thin plates comprise:

a first group of the thin plates, ~~a section of which in~~
10 ~~a length direction~~ has a ~~horizontal~~ central portion which is flat
in a length direction of the first group and ~~both~~ end portions
which are bent in ~~the~~ a thickness direction of the first group;
and

a second group of the thin plates which is laminated on
15 the first group of the thin plates, ~~a section of the~~ said second

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group of ~~the thin plates in a length direction~~ having a horizontal central portion which is flat in a length direction of the second group and ~~both~~ end portions which are bent in ~~the a~~ thickness direction of the second group.

13. (Currently Amended) The antenna as claimed in claim 12, ~~wherein the spacer is further comprising at least two spacers~~ provided between ~~the both~~ said bent end portions of the first group of the thin plates and ~~the both~~ corresponding said bent end portions of the second group of the thin plates.

14. (Currently Amended) The antenna as claimed in claim 12, wherein the magnetic material ~~comprises~~ is amorphous.

Claims 15-18 (Canceled).

19. (Currently Amended) A method for manufacturing an antenna comprising:

~~a first step of~~ placing a spacer at both end portions of a plurality of laminated thin plates that ~~is~~ are made of a magnetic material, and ~~further~~ laminating a plurality of thin plates that ~~is~~ are made of the magnetic material thereon to form a core material;

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~~a second step of~~ containing the core material in a pair of
upper and lower cases; and

10 ~~a third step of~~ winding a coil on the cases.

20. (Currently Amended) The method for manufacturing the
antenna as claimed in claim 19, wherein the magnetic material
~~comprises~~ is amorphous.